CLAIMS

1. A wiring comprising a Cu (copper) layer surrounded by a coating film made of titanium or titanium oxide.

2. A wiring comprising a Cu layer surrounded by a coating film made of molybdenum or molybdenum oxide.

3. A wiring comprising a Cu layer surrounded by a coating film made of chromium or chromium oxide.

4. A wiring comprising a Cu layer surrounded by a coating film made of tantalum or tantalum oxide.

5. A wiring as claimed in claim 1, wherein the coating film includes a titanium film and a film made of titanium oxide.

6. A wiring as claimed in claim 1, wherein the coating film includes a titanium film formed around the Cu layer, and a film which is made of titanium oxide and is formed on the surface of the titanium film.

7. A wiring as claimed in claim 1, wherein the coating film includes a titanium film provided at a portion of the circumferential area of the Cu layer, and a film which is provided at the remaining portion of the circumferential area of the Cu layer and is made of titanium oxide.

8. A wiring as claimed in claim 3, wherein the coating film includes a chromium film and a film made of chromium oxide.

9. A wiring as claimed in claim 3, wherein the coating film includes a chromium film formed around the Cu layer, and a film which is made of chromium oxide and is formed on the surface of the chromium film.

10. A wiring as claimed in claim 3, wherein the coating film includes a chromium film provided at a portion of the circumferential area of the Cu layer, and a film which is provided at the remaining portion of the circumferential area of the Cu layer and is made of chromium oxide.

11. A TFT (thin film transistor) substrate having a wiring as claimed in any one of claims 1 to 4.

12. A TFT substrate comprising a base and a wiring as claimed in claim 1 which is formed on the base via a TiN film.

13. A TFT substrate comprising a base and a wiring comprising a Cu layer and a coating film made of titanium or titanium oxide which is formed on the surface of the Cu layer, wherein the wiring is provided on the base via a TiN film.

14. A TFT substrate as claimed in claim 13, wherein the coating film of the wiring includes a titanium film formed around the Cu layer, and a film which is made of titanium oxide and is formed on the surface of the titanium film.

15. A method of manufacturing a TFT substrate, comprising the steps of:

forming a Cu film on a metallic film by using a target made of Cu, wherein the metallic film is formed on a base and is made of a metal selected from the group consisting of titanium, molybdenum, chromium, and tantalum;

patterning-processing the Cu film and the metallic film to make a wiring having a desired shape; and

annealing-processing the base so as to form a metallic coating film on the patterning-processed Cu film, wherein the metallic coating film is made of a metal selected from the group consisting of titanium, molybdenum, chromium, and tantalum;

16. A method of manufacturing a TFT substrate, comprising the steps of:

forming a TiN film on a base;

forming a film made of titanium or titanium oxide on the TiN film;

forming a Cu film on the film made of titanium or titanium oxide by using a target made of Cu, so that a multi-layered film is formed;

patterning-processing the multi-layered film to make a wiring having a desired shape; and

annealing-processing the base so as to form a coating film made of titanium or titanium oxide on the patterning-processed Cu film.

17. A method of manufacturing a TFT substrate, as claimed in claim 16, wherein the thickness of the film made of titanium or titanium oxide formed on the TiN film is 10 to 20 nm.

18. A method of manufacturing a TFT substrate, as claimed in claim 15 or 16, wherein the coating film includes oxygen.

19. A method of manufacturing a TFT substrate, as claimed in claim 16, wherein a titanium oxide layer, which is generated on the surface of the film made of titanium or titanium oxide before the Cu film is formed, is removed by plasma etching.

20. An LCD (liquid crystal display) comprising a pair of opposing substrates and a

liquid crystal disposed between the opposing substrates, wherein one of the pair of opposing substrates is a TFT substrate as claimed in any one of claims 11, 12, and 13.